

ABSTRACT

The invention provides a display device using thin film type electron sources having a structure that can be formed in a simple manufacturing process. A lower electrode, a protective insulating layer and an interlayer film are formed on a cathode substrate. An upper bus electrode made from a laminated film of a metal film lower layer and a metal film upper layer is provided further on the interlayer film. A film of an upper electrode of a thin film type electron source for each pixel constituted by an insulating layer serving as an electron accelerating layer on the lower electrode and the upper electrode is formed on two stripe electrodes of the upper bus electrode in that pixel and another upper bus electrode in an adjacent pixel by sputtering. Then, the upper electrode is separated by self-alignment due to a setback portion of the metal film lower layer and an overhang of the metal film upper layer of the corresponding upper bus electrode. Thus, a thin film type electron source separated in accordance with each pixel is formed.